

In the claims:

Following is a complete set of claims as amended with this Response.

1. (Currently Amended) A method, comprising:
receiving a persistence package;
~~extracting~~ deriving persistent data and metadata ~~having a model structure~~ from the persistence package;
establishing, based on the extracted metadata, a transform for a storage format for the persistent data during a runtime of the receiving system;
applying the transform to the persistent data to format the persistent data during the runtime of the receiving system; and
storing the persistent data in the storage format during the runtime of the system.
~~using metadata passed from the persistence package to establish at least one of a storage format and a storage location for the persistent data during a runtime of the receiving system.~~

2. (Currently Amended) The method of claim 1, further comprising storing the persistent data in ~~at least one of the storage format and the storage location~~ during the runtime of the system.

3. (Currently Amended) The method of claim 1, wherein the metadata comprises at least in part a description of a the model structure of the persistent data.

4. (Currently Amended) The method of claim 3 ~~claim 1~~, wherein the metadata conforms to a metadata template comprising rules for describing the model structure.

5. (Currently Amended) The method of claim 4, ~~wherein further comprising~~ extracting the persistent data and the metadata from the persistence package comprises using a filter.

6. (Canceled)

7. (Original) The method of claim 1, further comprising retrieving persistent data from storage using a transform during the runtime of the system.

8. (Original) The method of claim 1, further comprising receiving persistent data compatible with at least one of any type of processor, any type of programming language, any type of operating system, and any type of architecture.

9. (Currently Amended) An apparatus, comprising:
a data storage device;
a persistence engine to receive a persistence package, wherein the persistence engine extracts persistent data and metadata from the persistence package, wherein the persistence engine uses the extracted metadata passed from the persistence package to establish, during a runtime of the system, at least one of a storage format and a storage location to store the persistent data in the data storage device, and wherein the persistence engine applies the storage format to the persistent data to format the persistent data during the runtime of the receiving system.

10. (Original) The apparatus of claim 9, wherein the data storage device is external to a running system using the persistence engine.

11. (Currently Amended) The apparatus of claim 9, further comprising a storing interface to store the persistent data using ~~at least one of the storage format and the storage location.~~

12. (Original) The apparatus of claim 9, further comprising a retrieving interface to retrieve stored persistent data for use by one of the running system and an application.

13. (Original) The apparatus of claim 9, wherein the metadata comprises at least in part a description of the data model structure of the persistent data.

14. (Original) The apparatus of claim 13, further comprising a metadata template to format the metadata for readable reception by the persistence engine.
15. (Original) The apparatus of claim 9, wherein the persistence engine receives a persistence package comprising the metadata and the persistent data.
16. (Original) The apparatus of claim 9, wherein the persistence engine receives persistent data structured using any data model from a source comprising at least one of any type of processor, any type of operating system, any type of programming language, and any type of architecture.
17. (Original) The apparatus of claim 9, further comprising a metadata engine having a metadata reader and a metadata filter.
18. (Original) The apparatus of claim 17, wherein the metadata filter interprets the metadata.
19. (Original) The apparatus of claim 9, further comprising a transform engine having a set of transforms, a transform selector, and a transform generator.
20. (Original) The apparatus of claim 19, wherein a transform establishes at least one of the storage format and the storage location to store the persistent data in the data storage device.
21. (Original) The apparatus of claim 19, the transform selector further comprising a data model comparator.
22. (Original) The apparatus of claim 19, wherein the transform selector selects a transform based on filtered metadata.

23. (Original) The apparatus of claim 19, wherein the transform selector requests a transform from the transform generator based on filtered metadata.
24. (Original) The apparatus of claim 23, wherein the transform generator produces a transform that remodels the persistent data to approximate as closely as possible a preexisting transform from the set of transforms.
25. (Original) The apparatus of claim 23, wherein the transform generator produces a transform that substantially maintains the model structure of the persistent data received by the running system.
26. (Original) The apparatus of claim 23, wherein the transform generator produces a transform to remodel the persistent data to maximize efficient retrieval for an application.
27. (Original) The apparatus of claim 23, wherein the transform generator uses iterative read-write trials to produce a transform to remodel the persistent data to maximize storage and/or retrieval speed.
28. (Original) The apparatus of claim 23, wherein the transform generator produces a transform to remodel the persistent data to maximize data compression.
29. (Currently Amended) An apparatus, comprising:
a data model description receiver;
a set of transforms;
a data model comparator to produce a comparison between the data model description and a data model in a transform in the set of transforms; **and**
a transform generator, operational during system runtime, having an assembler to produce a transform based on the data model description **and** ~~and/or~~ the comparison; **and**
a transform engine to apply a transform to format persistent data for storage.

30. (Currently Amended) The apparatus of claim 29, wherein the transform generator further comprises ~~further comprising~~ a data model variance calculator coupled to the assembler.

31. (Currently Amended) The apparatus of claim 29, wherein the transform generator further comprises ~~further comprising~~ a data model approximator coupled to the assembler.

32. (Currently Amended) The apparatus of claim 29, wherein the transform generator further comprises ~~further comprising~~ an efficient storage/retrieval speed maximizer coupled to the assembler.

33. (Currently Amended) The apparatus of claim 32, wherein the storage/retrieval speed maximizer further ~~comprises comprising~~ a read/write iterator.

34. (Currently Amended) The apparatus of claim 29, wherein the transform generator further comprises ~~further comprising~~ a data compression maximizer coupled to the assembler.

35. (Currently Amended) The apparatus of claim 29, wherein the transform generator further comprises ~~further comprising~~ an indexing estimator coupled to the assembler.

36. (Currently Amended) A method, comprising:
receiving a data model description;
comparing the data model description to a preexisting data model; and
assembling a transform based on the data model description and ~~and/or~~ the comparison to establish a storage format ~~and/or a storage location~~ for persistent data during runtime of a system; and
applying a transform to format persistent data for storage.

37. (Original) The method of claim 36, wherein the assembling a transform includes measuring a variance between the data model description and a preexisting data model.

38. (Original) The method of claim 36, wherein the assembling a transform includes approximating a preexisting data model.

39. (Original) The method of claim 36, wherein the assembling a transform includes maximizing data storage speed and/or data retrieval speed.

40. (Original) The method of claim 39, wherein the maximizing speed includes iteratively performing data read/write trials and selecting the fastest trial.

41. (Original) The method of claim 36, wherein the assembling a transform includes maximizing data compression.

42. (Original) The method of claim 36, wherein the assembling a transform includes optimizing efficient indexing for the persistent data.

43. (Currently Amended) An article of manufacture, comprising:
a machine-readable medium comprising instructions, that when executed cause a machine to:

receive persistent data having a model structure;

receive metadata comprising at least in part a description of the model structure;

and

establish, using the metadata-during a runtime of the system, ~~at least one of a~~
storage format ~~and a storage location~~ for the persistent data; and

apply the established storage format to the persistent data to format the persistent data for storage.

44. (Currently Amended) The article of manufacture of claim 43, further comprising instructions, that when executed, cause a machine to store the persistent data using ~~at least one of the storage format and the storage location~~.

45. (Original) The article of manufacture of claim 43, further comprising instructions, that when executed, cause a machine to receive metadata conforming to a metadata template comprising rules for describing a data model structure of the persistent data.

46. (Currently Amended) The article of manufacture of claim 45, further comprising instructions, that when executed, cause a machine to receive a persistence package comprising the persistent data and the metadata and to extract the persistent data and the metadata from the persistence package.

47. (Currently Amended) The article of manufacture of claim 43, further comprising instructions, that when executed, cause a machine to retrieve the persistent data from ~~at least one of the storage format and the storage location~~.

48. (Original) The article of manufacture of claim 43, further comprising instructions, that when executed, cause a machine to select and/or create, based on the metadata, a transform to establish at least one of the storage format and the storage location.

49. (Original) The article of manufacture of claim 43, further comprising instructions, that when executed, cause a machine to receive persistent data compatible with one of any type of processor, any type of programming language, any type of operating system, and any type of architecture.